COUNTRY NOTE

EDUCATION AT A GLANCE 2020

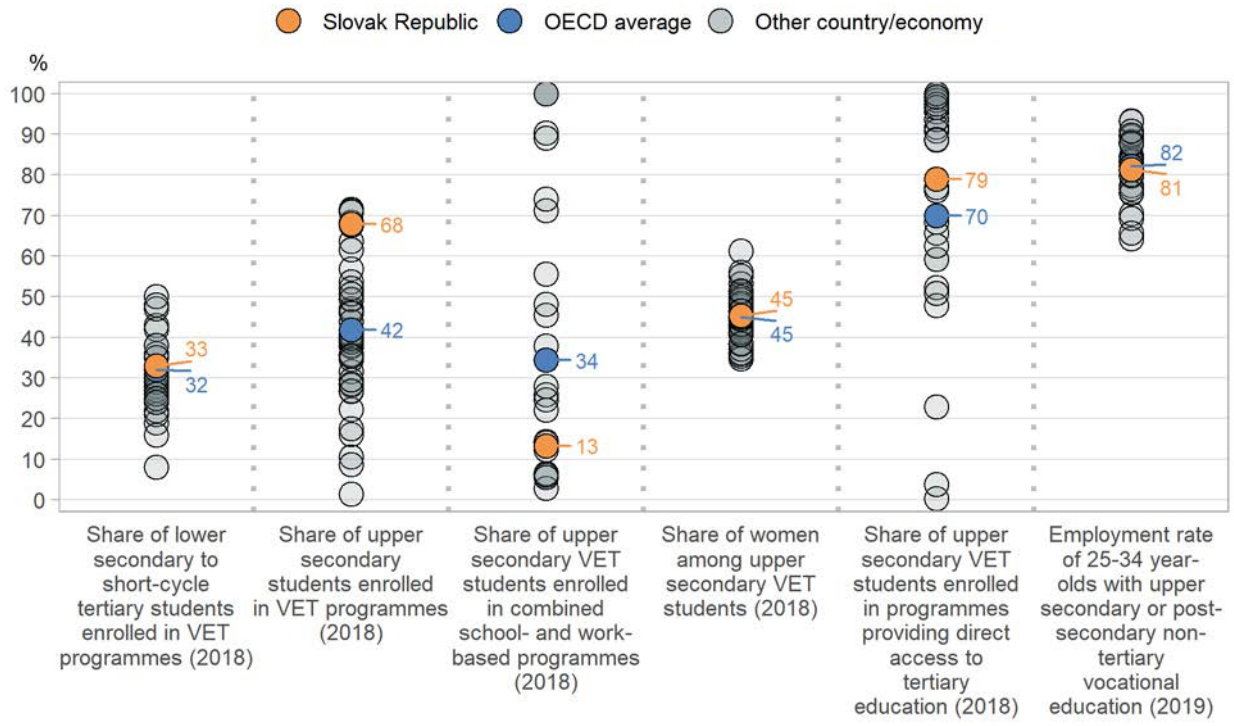
Education at a Glance: OECD Indicators is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in OECD and partner countries.

Slovak Republic

Participation and outcomes of vocational education and training

- Vocational education and training (VET) programmes attract a diverse range of students, including those seeking qualifications and technical skills to enter the labour market, adults wishing to increase their employability by developing their skills further, and students who may seek entry into higher education later on.
- About one in three students from lower secondary to short-cycle tertiary level are enrolled in a VET programme on average across OECD countries. However, there are wide variations across countries, ranging from less than 20% of students enrolled in vocational education to more than 45% in a few countries. In the Slovak Republic, 33% of students are enrolled in vocational programmes, slightly higher than the OECD average (32%), with the majority of lower secondary to short-cycle tertiary VET students (85%) found in upper secondary education (Figure 1).

Figure 1. Snapshot of vocational education



Note: Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.
Source: OECD (2020), indicator A3 and B7. See Education at a Glance Database. http://stats.oecd.org/ for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

- VET is an important part of upper secondary education in most OECD countries. On average, 68% of all upper secondary students opt for VET programmes in the Slovak Republic, a higher proportion than the OECD average of 42% (Figure 1). Certain fields of study are more common than others at this level. In the Slovak Republic, the most common broad field is engineering, manufacturing and construction with 38% of upper secondary vocational graduates earning a qualification in this field, compared to 33% on average across OECD countries.
- The organisation and delivery of upper secondary VET programmes varies considerably from country to country. In combined school- and work-based programmes, between 25% and 90% of the curriculum is taught as work-based learning, while the remainder is organised within the school environment. In the Slovak Republic, 13% of upper secondary vocational students are enrolled in combined school- and work-based programmes, which is lower than the OECD average of 34% (Figure 1).
- The average age of enrolment in upper secondary vocational programmes across OECD countries (21 years) tends to be higher than for general programmes (17 years), a pattern also found in the Slovak Republic. The average age of enrolment in upper secondary education is higher for students in vocational programmes (18 years) than for students in general programmes (17 years). The share of upper secondary vocational students tends to increase with age. In the Slovak Republic, the share of upper secondary students enrolled in VET is 67% among 15-19 year-olds (OECD average: 37%), and 88% among 20-24 year-olds (OECD average: 62%).
- To support upper secondary vocational students' transition to post-secondary education and improve their career prospects, many countries have created direct pathways from vocational programmes to higher levels of education. In the Slovak Republic, 79% of upper secondary vocational students are enrolled in programmes that offer the chance of direct access to tertiary education, higher than the OECD average of 70% (Figure 1).
- In 2019, 47% of 25-34 year-olds in the Slovak Republic held an upper secondary or post-secondary non-tertiary vocational qualification as their highest educational level while 4% held a general one. The employment rate of younger adults with a vocational upper secondary or post-secondary non-tertiary education tend to be higher than the employment rate of those with general qualifications at this level (by 9 percentage points on average across OECD countries). The Slovak Republic follows this pattern, as 81% of 25-34 year-olds with an upper secondary or post-secondary non-tertiary vocational qualification are employed compared with 77% of those with a general qualification (the difference is not statistically significant) (Figure 1).
- In some countries, including the Slovak Republic, the employment rate of younger adults with upper secondary vocational programmes is higher than for adults with tertiary education. Most of these countries have upper secondary or post-secondary vocational programmes with strong and integrated work-based learning or/and vocational programmes designed to offer students direct entry to the labour market. Similarly to most OECD countries, the employment advantage in the Slovak Republic decreases with age. Among 45-54 year-olds, this employment rate of adults with vocational upper secondary or post-secondary non-tertiary qualification is 88% and 87% for adults with a general qualification.
- On average across OECD countries, adults with an upper secondary or post-secondary non-tertiary vocational education have similar earnings to their peers with a general education at this level. While the difference in relative earnings between adults with general and vocational upper secondary or post-secondary non-tertiary attainment is less than 5 percentage points in about one quarter of OECD and partner countries, it is 10 percentage points in favour of general qualifications in the Slovak Republic.
- Poorer labour-market prospects of VET qualifications combined with higher tertiary attainment may have contributed to the decline in the share of adults with an upper secondary vocational qualification across generations in many countries. In the Slovak Republic, among those with

upper secondary or post-secondary non-tertiary education as their highest attainment, 95% of 55-64 year-olds (older adults), compared with 91% of 25-34 year-olds (younger adults) held a vocational qualification. In comparison, the equivalent OECD averages are 72% for older adults and 59% for younger adults.

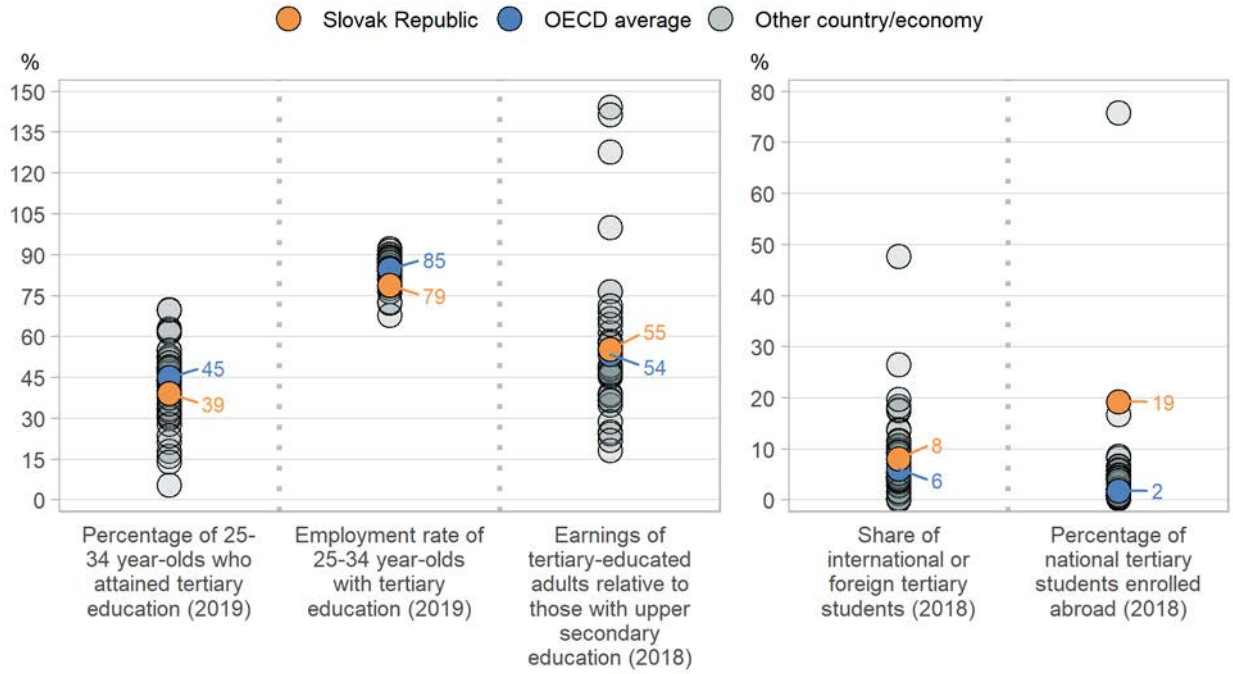
- On average across OECD countries, the ratio of students to teaching staff is similar in both upper secondary vocational and general programmes. In the Slovak Republic, there are 14 students for every teaching staff member in general programmes and 13 in vocational ones.

The rising demand for tertiary education

- The expansion of tertiary education is a worldwide trend. Between 2009 and 2019, the share of 25-34 year-olds with a tertiary degree increased in all OECD and partner countries. In the Slovak Republic, the share increased by 19 percentage points during this period, higher than the average increase across OECD countries (9 percentage points). In 2019, 39% of 25-34 year-olds had a tertiary degree in the Slovak Republic compared to 45% on average across OECD countries (Figure 2).
- From the gender perspective, younger women are more likely than younger men to achieve tertiary education in all OECD countries. In the Slovak Republic, 48% of 25-34 year-old women had a tertiary qualification compared to 31% of their male peers, while on average across OECD countries the shares are 51% of younger women and 39% of younger men.
- In the Slovak Republic, the average age of first-time entrants to tertiary education in 2018 was 22 years, the same as the OECD average. Structural factors, such as admission procedures, the typical age at which students graduate from upper secondary education, or cultural perceptions of the value of professional or personal experiences outside of education may explain the differences in the average age of entry to tertiary education across countries.
- If current entry patterns continue, it is estimated that 49% of young adults will enter tertiary education for the first time in their life before the age of 25 on average across OECD countries (excluding international students). In the Slovak Republic, 41% of young adults will enter tertiary education by that age and most of them will enter at bachelor's or equivalent level.
- Short-cycle tertiary programmes are generally designed to be vocationally oriented and represent the second most common route of entry into tertiary education on average across OECD countries, after bachelor’s programmes. If current entry patterns continue, 1% of adults are expected to enter short-cycle tertiary education before the age of 25 in the Slovak Republic, compared to 10% on average across OECD countries. In the Slovak Republic, women make up 65% of students in such programmes, compared to 52% on average across OECD countries.
- Young people can face barriers to labour market entry as they transition from school to work, but higher educational attainment increases their likelihood of being employed and is associated with higher incomes. On average across OECD countries, the employment rate in 2019 was 61% for 25-34 year-olds without upper secondary education, 78% for those with upper secondary or post-secondary non-tertiary education as their highest attainment and 85% for those with tertiary education. In the Slovak Republic, the shares are 33% for below upper secondary, 81% for upper secondary or post-secondary non-tertiary and 79% for tertiary attainment. Having a tertiary degree also carries a considerable earnings advantage in most OECD and partner countries. In the Slovak Republic, in 2018, 25-64 year-olds with a tertiary degree with income from full-time, full-year employment earned 55% more than full-time, full-year workers with upper secondary education compared to 54% on average across OECD countries (Figure 2).
- International student mobility has been expanding quite consistently in the past twenty years. In 2018, 5.6 million tertiary students worldwide had crossed a border to study, more than twice the

number in 2005. In the Slovak Republic, the share of foreign or international students increased from 6% in 2014 to 8% in 2018. Meanwhile 19% of Slovak tertiary students are enrolled abroad compared to 2% in total across OECD countries (Figure 2). English-speaking countries are the most attractive student destinations overall in the OECD area, with Australia, Canada, the United Kingdom and the United States receiving more than 40% of all internationally mobile students in OECD and partner countries. Among students leaving the Slovak Republic to study, the most popular destination country is the Czech Republic.

Figure 2. Snapshot of tertiary education



Note: Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.
Source: OECD (2020), indicator A1, A3, A4 and B6. See Education at a Glance Database http://stats.oecd.org/for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

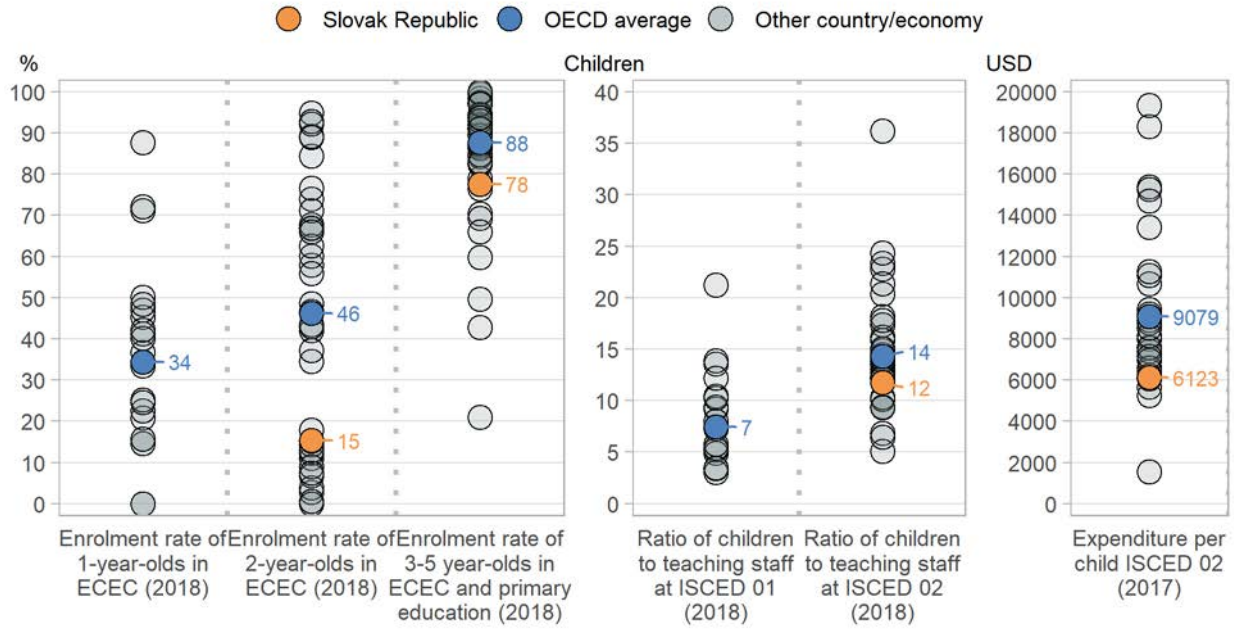
Starting strong

- Early childhood education and care (ECEC) has experienced a surge of policy attention in OECD countries in recent decades, with a focus on children under the age of 3 in many countries. Among 2 year-olds, the enrolment rate at ISCED 0 is 15% in the Slovak Republic, 31 percentage points below the OECD average of 46% (Figure 3).
- In many OECD countries, ECEC begins for most children long before they turn 5 and there are universal legal entitlements to a place in ECEC services for at least one or two years before the start of compulsory schooling. While compulsory education begins at age 6 in the Slovak Republic, 78% of 3-5 year-olds in 2018 are enrolled in ECEC programmes and primary education in the Slovak Republic, compared to 88% on average across OECD countries (Figure 3).
- Public provision of early childhood education and care is an important factor in ensuring broad access to affordable ECEC. On average across OECD countries, more than one in two of the children in early childhood educational development services (ISCED 01) are enrolled in private

institutions. Enrolment in private institutions is usually less common for 3-5 year-olds, who are usually enrolled in pre-primary education (ISCED 02), than for younger children. In the Slovak Republic, 7% of children attending pre-primary education are enrolled in private institutions, compared to one in three children on average across OECD countries.

- The workforce is at the heart of high-quality early-childhood education and care: stimulating environments and high-quality pedagogy are fostered by better-qualified practitioners and high-quality interactions between children and staff facilitate better learning outcomes. In that context, lower child-staff ratios are found to be consistently supportive of staff-child relationships across different types of ECEC settings (NICHD, 2002). In the Slovak Republic, the ratio of children for every full-time equivalent (FTE) teacher working in pre-primary education (ISCED 02) is 12 compared to 14 on average across OECD countries (Figure 3).
- Sustained public financial support is critical for the growth and quality of ECEC programmes. In 2017, annual total expenditure in pre-primary settings (ISCED 02) averaged USD 6 123 per child in the Slovak Republic, lower than the average across OECD countries (USD 9 079) (Figure 3).

Figure 3. Snapshot of early childhood education and care



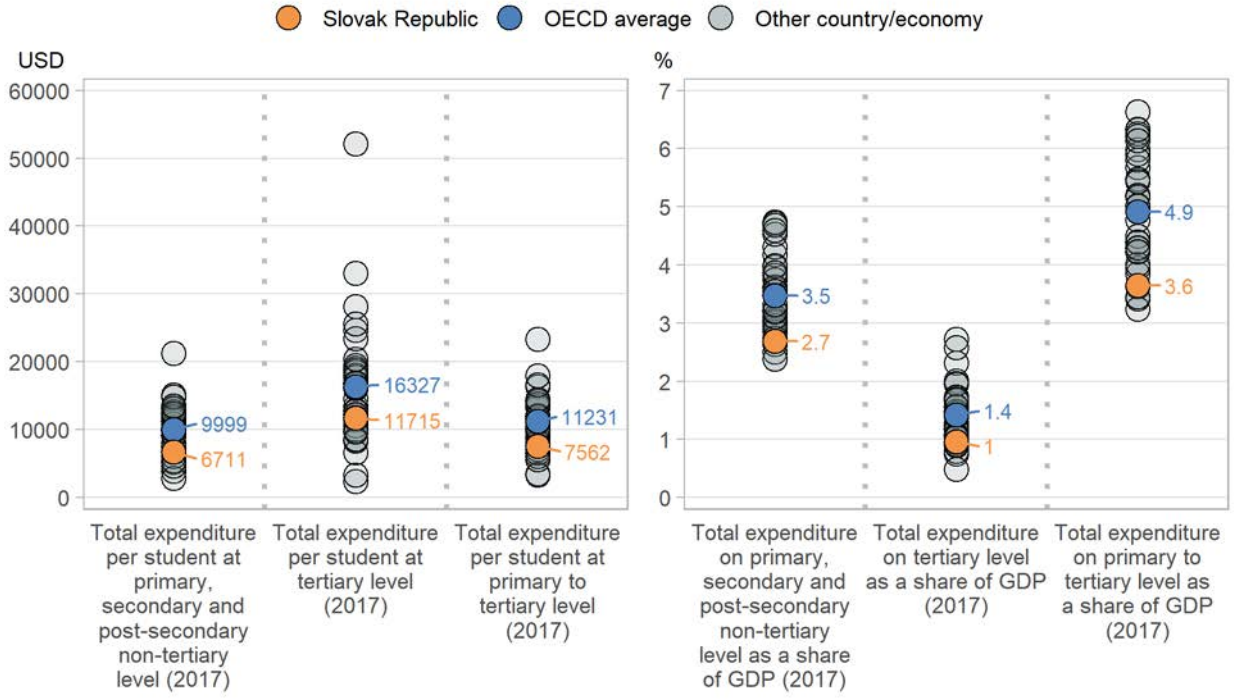
Note: Only countries and economies with available data are shown. Annual expenditure per child is shown in equivalent USD converted using PPPs. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.
Source: OECD (2020), indicator B2. See Education at a Glance Database http://stats.oecd.org/ for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

Investing in education

- Annual expenditure per student on educational institutions from primary to tertiary level provides an indication of the investment countries make in each student. In 2017, the Slovak Republic spent less on primary to tertiary educational institutions per full-time student than the OECD average, investing a total of USD 7 562 per student compared to USD 11 231 on average across OECD countries (Figure 4).

- The way education is provided influences how resources are allocated between levels of education and between public and private institutions. In 2017, the Slovak Republic spent USD 6 711 per student at non-tertiary level (primary, secondary and post-secondary non-tertiary education), USD 3 288 lower than the OECD average of USD 9 999. At tertiary level, the Slovak Republic invested USD 11 715 per student, USD 4 613 less than the OECD average (Figure 4). Expenditure per student on private educational institutions is higher than on public institutions on average across OECD countries. However, this is not the case in the Slovak Republic, where total expenditure on public institutions from primary to tertiary level amounts to USD 7 601 per student, compared to USD 7 206 on private ones.
- In most OECD countries, expenditure per upper secondary student varies according to programme orientation. Spending per student on upper secondary vocational programmes tends to be higher than for upper secondary general ones due to the higher cost of equipment, lower student-to-teacher ratios, and work-based requirements of such programmes. On average across OECD countries, expenditure per student in upper secondary vocational programmes was USD 1 470 higher than in general programmes in 2017. The Slovak Republic follows the same pattern: spending per student amounted to USD 7 441 in upper secondary vocational programmes, USD 225 higher than spending per student on general ones at the same level.
- Among OECD countries, the Slovak Republic was among the countries that spent the lowest proportion of its gross domestic product (GDP) on primary to tertiary educational institutions. In 2017, the Slovak Republic spent 3.6% of GDP on primary to tertiary educational institutions, which is 1.3 percentage points lower than the OECD average. Across levels of education, the Slovak Republic devoted a below average share of GDP at non-tertiary levels and a lower share at tertiary level (Figure 4).
- Between 2012 and 2017, expenditure per student from primary to tertiary education increased by an average annual growth rate of 1.3% across OECD countries. In the Slovak Republic, expenditure on educational institutions grew at an average rate of 2.7% a year, while the number of students fell on average by 1.4% per year. This resulted in an average annual growth rate of 4.2% in expenditure per student over this period.
- There are no tuition fees for a bachelor's degree for national students in the Slovak Republic. While loans may reduce the upfront cost of education and living expenses, students are required to repay them once they start work. In the Slovak Republic, students' average debt on graduation is USD 3 127.

Figure 4. Snapshot of the financial resources invested in educational institutions



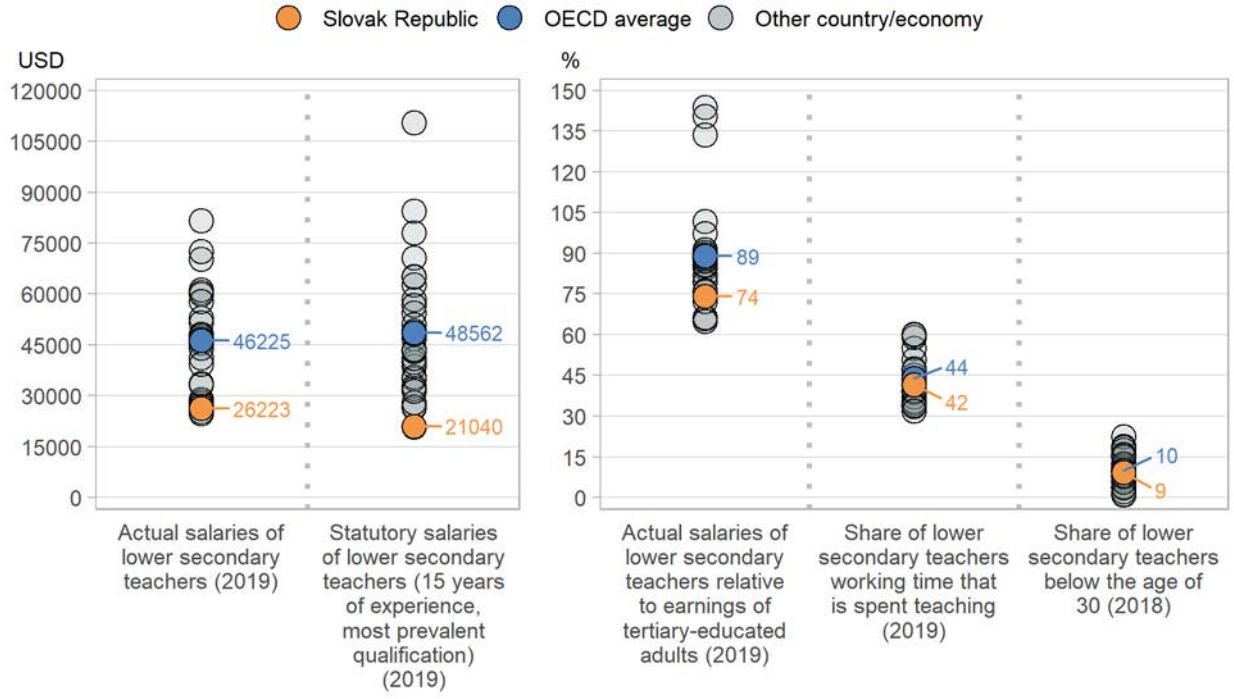
Note: Only countries and economies with available data are shown. Expenditure in national currencies is converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for GDP. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.
Source: OECD (2020), indicator C1 and C2. See Education at a Glance Database http://stats.oecd.org/ for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

Working conditions of school teachers

- The salaries of school staff, and in particular teachers and school heads, represent the largest single expenditure in formal education. Their salary levels also have a direct impact on the attractiveness of the teaching profession. In most OECD countries and economies, statutory salaries of teachers (and school heads) in public educational institutions increase with the level of education they teach. In most OECD countries and economies, they also increase with experience. On average, statutory salaries of teachers with maximum qualifications at the top of their salary scales are 78-80% higher than those of teachers with the minimum qualifications at the start of their career at pre-primary (ISCED 02), primary and general lower and upper secondary levels. In the Slovak Republic, maximum salaries are 73% to 73% higher than minimum salaries at each level of education.
- Teachers' actual salaries reflect their statutory salaries and additional work-related payments. Average actual salaries depend also on the characteristics of the teaching population such as their age, level of experience and qualification level. In the Slovak Republic, teachers' average actual salaries amount to USD 20 391 at the pre-primary level (ISCED 02) (lower than the OECD average of USD 38 677), USD 26 223 at the primary level (lower than the OECD average of USD 43 942), USD 26 223 at the general lower secondary level (lower than the OECD average of USD 46 225) and USD 27 302 at the general upper secondary level (lower than the OECD average of USD 49 778) (Figure 5).

- Teachers' average actual salaries remain lower than those of tertiary-educated workers in almost all countries, and at almost all levels of education. Teachers' average actual salaries at pre-primary (ISCED 02), primary and general secondary levels of education are 80-94% of the earnings of tertiary-educated workers on average across OECD countries and economies. In the Slovak Republic, the proportion ranges from 58% at pre-primary level (ISCED 02) 74% at primary level to 74% at lower secondary level and 77% at the upper secondary level (Figure 5).
- The average number of teaching hours per year required of a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases, from 993 hours at pre-primary level (ISCED 02), to 778 hours at primary level, 712 hours at lower secondary level (general programmes) and 680 hours at upper secondary level (general programmes). In the Slovak Republic, teachers are required to teach 1 144 hours per year at pre-primary level, 733 hours per year at primary level, 649 hours at lower secondary level (general programmes) and 564 hours at upper secondary level (general programmes).
- During their working time, teachers also perform various non-teaching tasks such as lesson planning and preparation, marking students' work and communicating or co-operating with parents or guardians. At the lower secondary level, teachers in the Slovak Republic spend 42% of their statutory working time on teaching, compared to 44% on average among OECD countries (Figure 5).
- Large proportions of teachers in many OECD countries will reach retirement age in the next decade, while the size of the school-age population is projected to increase in some countries, putting many governments under pressure to recruit and train new teachers. In the Slovak Republic, 7% of primary teachers are considered young teachers (under the age of 30), which is lower than the OECD average of 12%. On average across OECD countries, the proportion of young teachers decreases at other levels of education, to 10% in lower secondary education and 8% in upper secondary education. In the Slovak Republic, the proportion of young teachers increases to 9% at lower secondary level and to 8% at upper secondary level (Figure 5). Between 2005 and 2018, the proportion of young teachers at upper secondary level decreased by 5 percentage points in the Slovak Republic, whereas it fell by 4 percentage points on average across OECD countries during this period.

Figure 5. Snapshot of teachers' working conditions



Note: Only countries and economies with available data are shown. Teachers' salaries are shown in equivalent USD converted using PPPs. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.
Source: OECD (2020), indicator D3, D4 and D5. See Education at a Glance Database http://stats.oecd.org/ for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

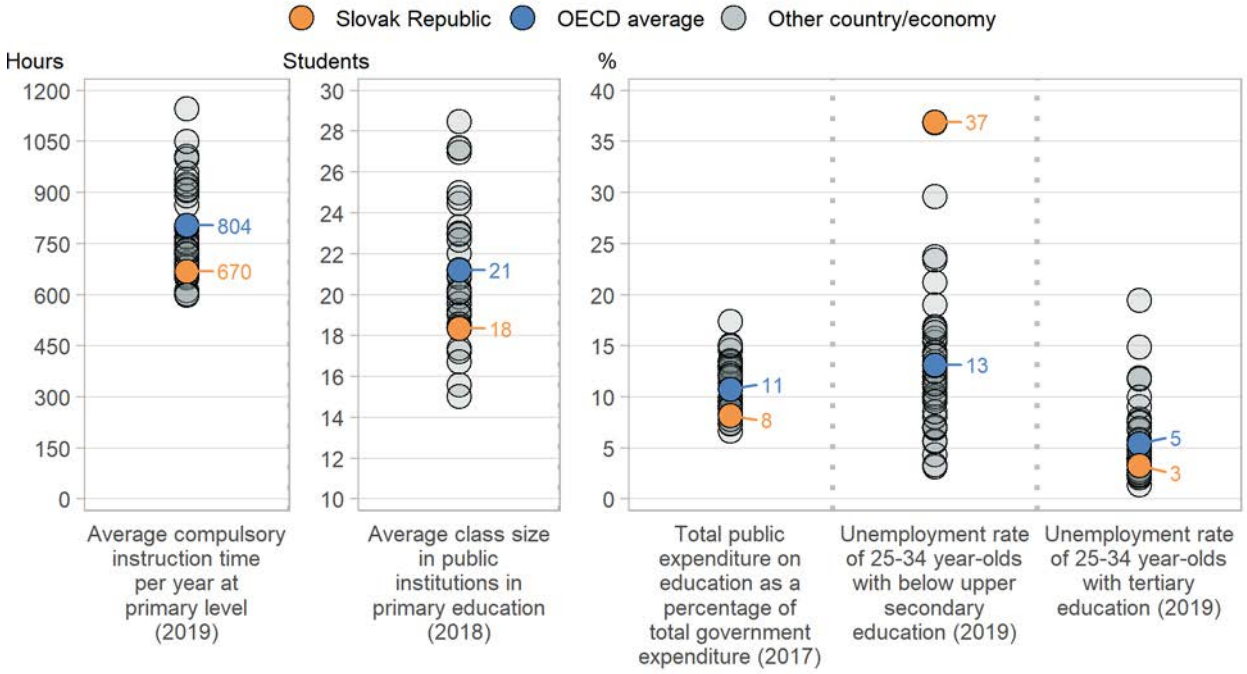
The impact of COVID-19 on education

- The global 2020 COVID-19 pandemic has sent shockwaves around the world. In a first effort to contain the virus, many countries have imposed a lockdown and schools and/or universities have closed for several months across all OECD and partner countries. In the Slovak Republic, the closures were localised from 10 March 2020 and on 16 March 2020, closures became nationwide. Schools started progressively reopening on 1 June 2020. By the end of June, the Slovak Republic had experienced 16 weeks of effective school closures in some form, compared to 14 weeks on average across OECD countries (UNESCO, 2020). However, the actual impact in some countries may have been less severe as some of these periods included scheduled school breaks.
- Excluding the non-compulsory part of the curriculum, students in public institutions in the Slovak Republic attended classes for 670 hours per year on average at primary level and 815 hours at lower secondary level in 2019. Each week of school closure therefore represents about 18 hours of compulsory instruction time at the primary level and 22 hours of compulsory instruction time at lower secondary level during which students have physically not attended school (Figure 6). During this time, many OECD and partner countries have turned to distance learning to ensure the continuity of education.
- School reopening in the context of the pandemic is contingent on the capacity to maintain a safe distance of 1-2 metres between pupils and staff. Countries with smaller class sizes may find it easier to comply with new restrictions on social distancing. In the Slovak Republic, the average class size at primary level is 18 students in public institutions, which is smaller than the

OECD average of 21. In public lower secondary institutions, there are 19 students per class in the Slovak Republic, compared to 23 students per class on average across OECD countries. However, the need to reduce class size may depend on other factors such as physical space, the availability of rooms and staff, and personal decisions by students and staff on whether to return to school (Figure 6).

- While there is uncertainty about the likely overall impact of the COVID-19 pandemic on education expenditure, governments will face difficult decisions on the allocation of resources, as government funds are injected into the economy and the health sector. In 2017, public spending on primary to tertiary education as a share of government expenditure in the Slovak Republic was 8%, lower than the OECD average of 11% (Figure 6).
- As unemployment rises, private funding of education may also be at risk. The impact may be most severe in those countries and levels of education that rely most heavily on household expenditure, in particular early childhood education and care and tertiary education. This is less the case in the Slovak Republic. In pre-primary education (ISCED 02), private sources accounted for 12% of total expenditure in the Slovak Republic in 2017, lower than the OECD average of 17%. At tertiary level, 29% of total expenditure comes from private sources, compared to 29% on average across OECD countries.
- The crisis may have a severe impact on the internationalisation of higher education as the delivery of online course material and travel restrictions may raise questions among international students' perception on the value of obtaining their degree from an institution abroad. The Slovak Republic, with a higher share of foreign students than in total across the OECD, may be more strongly affected than other countries.
- Unemployment may increase, as the economy struggles to cope with the reduced activity that resulted from the lockdown. Those with lower educational attainment are the most vulnerable, as they are the most unlikely to benefit from remote working. In 2019, before the pandemic hit, 37% of young adults with below upper secondary education in the Slovak Republic were unemployed compared to 3% of tertiary-educated 25-34 year-olds (Figure 6). In the aftermath of the 2008 financial crisis, the unemployment of young adults without an upper secondary education increased by 5.4 percentage points between 2008 and 2009 in the Slovak Republic compared to 1.1 percentage points among those with tertiary education.

Figure 6. Snapshot of indicators relevant to the impact of COVID-19 on education



Note: Only countries and economies with available data are shown. The years shown in parentheses is the most common year of reference for OECD and partner countries. Refer to the source table for more details.
Source: OECD (2020), indicator A3, D1, D2, and C4. See Education at a Glance Database http://stats.oecd.org/ for more information and Annex 3 for notes (https://doi.org/10.1787/69096873-en).

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More information

For more information on Education at a Glance 2020 and to access the full set of Indicators, visit www.oecd.org/education/education-at-a-glance-19991487.htm

For more information on to the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, visit Annex 3 of the publication (https://doi.org/10.1787/69096873-en).

For general information on methodology, please refer to the OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (https://doi.org/10.1787/9789264304444-en).

Updated data can be found on line at http://dx.doi.org/10.1787/eag-data-en and by following the *StatLinks* under the tables and charts in the publication.

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The calculation on the number of weeks of school closures due to the COVID-19 pandemic is based on data from UNESCO (UNESCO, 2020). For general information on the methodology considered for the data, please refer to the methodological note.

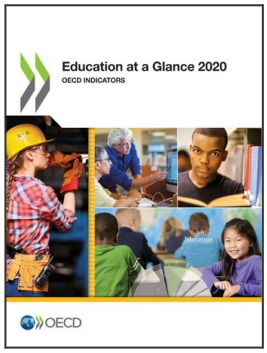
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On 15 May 2020, the OECD Council invited Costa Rica to become a Member. While Costa Rica is included in the OECD averages reported in this note, at the time of its preparation, Costa Rica was in the process of completing its domestic procedures for ratification and the deposit of the instrument of accession to the OECD Convention was pending.

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From:
Education at a Glance 2020
OECD Indicators

Access the complete publication at:
https://doi.org/10.1787/69096873-en

Please cite this chapter as:

OECD (2020), "Slovak Republic", in *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/93fa3f80-en

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